UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
CHERY, DADY

ART UNIT	PAPER NUMBER
2616	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/797,989	PEACOCK, JOHN KENT
	Examiner	Art Unit	
	DADY CHERY	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>04/17/2008</u>.
2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-39</u> is/are pending in the application.
  4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) <u>33</u> is/are allowed.
6) ☐ Claim(s) <u>1, , 6-9, 18, 22-25, 34 -38 , 3 -5 and 19 -21</u> is/are rejected.
7) ☐ Claim(s) <u>10 -16-and 22-32</u> is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  a) ☐ All b) ☐ Some * c) ☐ None of:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. _____.
    3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

This communication is responsive to the amendment filed on 04/17/2008.

Response to Arguments

Applicant's arguments with respect to claims 1, 17,35 have been considered but are

moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

2.   The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

   1.   Determining the scope and contents of the prior art.

   2.   Ascertaining the differences between the prior art and the claims at issue.

   3.   Resolving the level of ordinary skill in the pertinent art.

   4.   Considering objective evidence present in the application indicating

          obviousness or nonobviousness.

3.   This application currently names joint inventors. In considering patentability of

the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)

prior art under 35 U.S.C. 103(a).

4.   Claims 1, 6-9, 18, 22-25, 34 -37 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Hanko in view of Porikli et al. (US Patent 7,027,403, hereinafter

Porikli).

    Regarding claims 1 and 35 , Hanko discloses *in a first data communication*

device (Fig. 2, 101) *that receives data from a second data communication device* (103)

over a network (102), *a method comprising:*

detecting an actual bandwidth associated with receiving data from the second data

communication device (Fig. 3, 302); *generating a bandwidth metric based on the actual*

bandwidth associated with receiving the data (303), *the bandwidth metric identifying a*

proposed data rate for transmitting future data from the second data communication

device to the first data communication device(306); *and transmitting the bandwidth*

metric to the second data communication device (Col. 10, lines 41- 69, the estimate is

considered as the receiving data rate). Hanko discloses a method where the receiver

detects the bandwidth of the communication medium and determine the average

bandwidth allocation for each data source.

Honko fails to teach *wherein detecting the actual bandwidth*

includes: receiving data from the second data communication device; and

measuring a rate of receiving the data from the second communication

device .

However, Porikli teaches *wherein detecting the actual bandwidth*

includes: receiving data from the second data communication device; and

measuring a rate of receiving the data from the second communication

device **(Abstract, Col. 2, lines 5 -20, the data rate is measured by the second**

device for future transmission as described by the instant application) .

Therefore, It would have been obvious to one of ordinary skill in the art at the

time the invention was made to combine the method and system discloses by Porikli

into the method and system taught by Hanko for the purpose of minimize the cost of

renegotiation over time **(Abstract).**

Regarding claims 6 and 22, Hanko discloses *a method as in claim 1, wherein the*

first data communication device is a thin client in which a majority of data processing

associated with a user at the thin client is performed at the second data communication

device, the method further comprising: utilizing the data received from the second data

communication device to control a human interface device associated with the thin

client (Fig. 1 and Fig. 2 , Col. 9, lines 65 – Col. 10, lines 41).

Regarding claims 7 and 23, Hanko discloses *a method as in claim 1, wherein generating the bandwidth metric is performed in response to receiving a request for bandwidth allocation received from the second data communication device* (Col. 10, lines 54 – 58).

Regarding claims 8 and 24, Hanko discloses *a method as in claim 1 further comprising: receiving multiple bandwidth allocation requests associated with multiple processes maintained at the second data communication device, the multiple processes generating independent sets of data for transmission to the first data communication device; and granting bandwidth, via transmission of multiple bandwidth metrics, to the second data communication device for streaming the independent sets of data associated with the multiple processes from the second data communication device to the first data communication device* (Fig. 1, Col. 10, lines 41 - 53).

Regarding claims 9 and 25, Hanko discloses *a method as in claim 1 further comprising: in addition to transmitting the bandwidth metric to the second data communication device, providing a unique identifier along with the bandwidth metric for use by the second data communication device to tag the future data transmitted from the second data communication device to the first data communication device* (Col. 10, lines 54 – 59).

Regarding claims 17 and 34, Hanko discloses *a first data communication device* (Fig. 1, 101) *that adaptively allocates bandwidth to a second data communication device* (103) *for transmitting data over a network* (102) *susceptible to congestion, the computer system* **(Fig.1)** *including: a processor* **(Inherent feature); ** *a memory unit*

(inherent feature) that stores instructions associated with an application

executed by the processor; a communication interface (Fig. 2, 202) that supports

communication with nodes in the network; and an interconnect (102)coupling the

processor, the memory unit, and the communication interface, enabling the first data

communication device to execute the application and perform operations of **(Col. 9,**

lines 63 – Col. 10, lines 41): *detecting an actual bandwidth associated with receiving*

data from the second data communication device generating a bandwidth metric based

on the actual bandwidth associated with receiving the data, the bandwidth metric

identifying a proposed data rate for transmitting future data from the second data

communication device to the first data communication device; and transmitting the

bandwidth metric to the second data communication device **(Col. 10, lines 41-**

69).Hanko discloses a method where the receiver detects the bandwidth of the

communication medium and determine the average bandwidth allocation for each

data source.

Honko fails to teach *wherein detecting the actual bandwidth includes:*

receiving data from the second data communication device; and measuring a rate of

receiving the data from the second communication device .

However, Porikli teaches *wherein detecting the actual bandwidth includes:*

receiving data from the second data communication device; and measuring a rate of

receiving the data from the second communication device **(Abstract, Col. 2, lines 5 -**

20, the data rate is measured by the second device for future transmission as

described by the instant application) .

Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the method and system discloses by Porikli into the method and system taught by Hanko for the purpose of minimize the cost of renegotiation over time **(Abstract).**

Regarding claim 36, Hanko discloses *a method as in claim 1, wherein detecting the actual bandwidth includes: monitoring a rate of receiving data from the second data communication device, the data received by the first data communication device being used to drive at least one output device associated with the first data communication device* (Col. 10, lines 42 – 66).

Regarding claim 37, Hanko discloses *a method as in claim 1 further comprising: receiving the future data from the second data communication device based on the proposed data rate* (Col. 10, lines 54 -59).

Regarding claim 38, Hanko discloses *a method as in claim 1 further comprising: repeating steps of: i) detecting a current bandwidth of receiving data at the first data communication device from the second data communication device and ii) notifying the second data communication device of a proposed bandwidth rate for receiving future data such that the first data communication device receives the future data at a desired bandwidth rate* (Col. 10, lines 54 – 59 and Col. 11, lines 14 – 18).

5.   Claims 3 -5 and 19 -21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hanko in view of Porikli in further in view of Tolety.

Regarding claims 3 and 19, Hanko discloses *a method as in claim 2 further comprising: generating the bandwidth metric* **((Col. 10, lines 54 – 59 and Col. 11, lines 14 – 18).**

Hanko fails to clearly teach *the proposed data rate for transmitting future data from the second data communication device to the first data communication device is based on the actual bandwidth.*

However, Porikli teaches *which is the proposed data rate for transmitting future data from the second data communication device to the first data communication device, based on the actual bandwidth*(**Abstract, Col. 2, lines 5 -20, the data rate is measured by the second device for future transmission as described by the instant application) .**

Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the method and system discloses by Porikli into the method and system taught by Hanko for the purpose of minimize the cost of renegotiation over time **(Abstract).**

Hanko fails to *teach identifying a round trip time associated with communications between the first data communication device and the second data communication device;* However, Tolety teaches *identifying a round trip time associated with communications between the first data communication device and the second data communication device* **(Col. 7, lines 61 – Col. 8, lines 25 and equation F6). Where Tolety discloses a method to determine the minimum time it takes for the**

information to traverse the path (RTT), and generating a bandwidth based on the measuring bandwidth and the RTT as described by the instant application.

Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the round trip time associated with communications between the first data communication device and the second data communication device for determine the bandwidth in order to exercising the communication path formed by the communication system components (Col. 7, lines 65 -67).

Regarding claims 4, 5, 20, 21, Hanko combine with Porikli discloses *a method as in claim 1 further comprising: receiving the data from the second data communication device i) in accordance with the proposed data rate identified by the bandwidth metric* **(Abstract, Col. 2, lines 5 -20, the data rate is measured by the second device for future transmission as described by the instant application)** .

Hanko fails to teach based on use of a non-acknowledgment data transmission protocol and receiving the data from the second communication device based on use of UDP (User Data Protocol).

However, the examiner take official notice that non-acknowledge and UDP protocol are well known protocol. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a non-acknowledgment or UDP protocol for the purpose of decreasing the traffic volume on the network.

Allowable Subject Matter

6.   Claims 10 -16, 26 -32 and 39 would be allowable if rewritten to overcome the

rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to

include all of the limitations of the base claim and any intervening claims.

7.   Claim 33 is allowed.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to DADY CHERY whose telephone number is (571)270-

1207. The examiner can normally be reached on Monday - Thursday 8 am - 4 pm ESt.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ricky Q. Ngo can be reached on 571-272-3139. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ricky Ngo/
Supervisory Patent Examiner, Art Unit 2616

/Dady Chery/
Examiner, Art Unit 2616
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